

Application No.: 09/505,621

2

Docket No.: 136922001900

REMARKS

The Examiner again rejected all pending Claims 1-6 and 41-43. He rejected Claims 1-3, 5 and 6 under 37 USC §103 as unpatentable over Linnartz in view of Panabaker, and further in view of Callway. The Examiner also referred to Claim 43 in the same portion of the rejection so it is understood that he intended to reject Claim 43 similarly and presumably also similar Claim 42. Claims 42 and 43 are directed to similar subject matter but have different respective base claims.

The Examiner rejected also Claims 4 and 41 under §103 citing Linnartz in view of Panabaker and further in view of Callway and the admitted prior art. Claims 4 and 41 are dependent claims.

The rejections are all traversed. The Examiner has again essentially made the same rejection as his immediate prior rejection, but further cited Panabaker. The Examiner stated in pertinent part (see rejection page 3):

Panabaker discloses a standard for encoding data in the vertical blanking interval of a video signal in which data is transmitted in packets that contain at most 26 bytes (or $26 \times 8 = 208$ bits) of user data (see figure, page 5). Because Linnartz discloses that the associated data (the ticket T) can be up to 1000 bytes long (column 6, lines 20-21), and each packet can hold only 208 bits of data, it would have been obvious that in order to fit a ticket longer than 208 bytes into such data packets, it would be necessary to divide the associated data and have it extend over several fields of the video signal (noting that at minimum, one packet is transmitted per field). Further

pa-974786

Application No.: 09/505,621

3

Docket No.: 136922001900

it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Linnartz by including the standard described by Panabaker, in order to allow the efficient transport of any type of packet data and to provide a standardize method of such data transport (see Panabaker, page 22, section 14, seconds paragraph).

The Examiner continued at page 4:

Although the combination of Linnartz and Panabaker renders obvious the use of associated data extending over a plurality of video fields, neither Linnartz nor Panabaker explicitly discloses sending the associate data on a line of the vertical blanking interval carrying parental blocking data. Callway discloses a method for detecting protection of video signals that includes an indication of protection. . . Callway further discloses that this data access parameter. . . is included in the vertical blanking interval of the video signal. . .

The rejection is traversed. Panabaker actually teaches away from a feature of the present invention and hence its combination with the other references is not properly motivated, and contrary to the Examiner, would not be apparent to one skilled in the art.

Panabaker teaches away from the present claims.

Panabaker actually teaches away from a feature of the present claims and hence its combination with the other references is not properly motivated.

Panabaker specifically teaches away from using for carrying data the particular horizontal scan line in the vertical blanking interval which is the horizontal scan line "carrying parental blocking data" recited in Claim 1. Panabaker specifically says in his disclosure not to use

pa-974786

Application No.: 09/505,621

4

Docket No.: 136922001900

this line for carrying data. See Panabaker page 4, paragraph 3.1.1 "525 line systems" referring to the U.S. NTSC television. See the third paragraph of this section "There are 12 possible VBI lines being broadcast 60 times a second (each field 30 times a second). In some countries Line 21 is reserved for the transport of closed captioning data. .in that case there are 11 possible VBI lines, some or all of which could be used for IP transport."

Hence Panabaker recognizes that television line 21 is used for closed captioning (and also as is known for parental blocking data) and he specifically does not use that line for his IP data transport since he does not want to interfere with closed caption data on that reserved line 21.

Similarly, in the following section 3.1.2 of Panabaker referring to "625 Line Systems" which is the PAL/SECAM television standard used in other countries, he makes a similar disclosure in the second paragraph, "There are therefore 17 possible VBI lines being broadcast 50 times a second (each field 25 times a second) some or all of which could be for IP transport. It should be noted that some of these lines are sometimes used for existing, proprietary, data and testing surfaces. IP therefore becomes one or more data services using a subset or all of these lines." However it would be understood that if a line was reserved for closed captioning in PAL/SECAM TV, Panabaker would again not use it for his IP transport since closed captioning is not an "existing, proprietary, data and testing service" but is a government mandated service where used.

pa-974786

Application No.: 09/505,621

5

Docket No.: 136922001900

Hence Panabaker teaches away from carrying his IP (Internet Protocol) data on line 21 or on any other line reserved for parental blocking data. There is good reason for this. Panabaker packs a relatively large amount of information into each horizontal scan line for purposes of carrying his IP data. See Panabaker, page 5, middle of the page:

The NABTS packet is a 36-byte structure encoded onto one horizontal scan line of a television signal having the following structure. . .

Hence Panabaker puts 36 data bytes into each scan line, where each byte as pointed out by the Examiner would typically have 8 bits, resulting in 288 bits per scan line. It is believed this would occupy most or almost all of the scan line and hence prevent transmitting other information in that line such as the closed captions or the parental blocking data as mandated in the U.S. Hence Panabaker determined he could not use the parental blocking/closed captioning scan line as pointed out in his paragraph 3.1.1 for carrying data and hence he avoids that line. This is because at least in part his system carries relatively large amounts of data, for instance Internet type data.

In contrast in accordance with the present invention, typically the amount of data transmitted is much more modest since the data is typically a cryptographic ticket rather than large amounts of Internet type data. As set forth in the present specification at page 13, a typical data load is (see beginning page 23) "16-bits per field when carrying the ticket on line 21." This is only

pa-974786

Application No.: 09/505,621

6

Docket No.: 136922001900

two data bytes, which is 1/18th of the amount of data (36 bytes per line) carried in Panabaker.

Hence it is possible to use line 21 in part because very little of it is being used.

In addition, the present invention is not generally concerned with broadcast television and hence need not adhere to the mandated broadcast television standards. Instead typically (see preamble) the Claim 1 method is for controlling copying of the video signal and does not necessarily apply to broadcast video but instead more commonly to video being played from other sources such as a cable TV set top box. Hence in addition to the relatively low data payload per line, adherence to for instance FCC standards (not putting data on video line 21) is not necessarily required. Hence use of line 21 is not only available but desirable since it is known that other types of devices such as personal computers must recognize data present on video line 21. See present specification page 6, first full paragraph pointing out the usefulness of line 21 for this purpose. Moreover, in TV field 2, line 21 is in fact available even under the FCC standard for carrying data other than closed captioning or parental blocking. Again Panabaker failed to recognize this. However, the present inventors recognized the usefulness of video line 21 for carrying their data ticket.

Therefore, with the rejection citing Panabaker in combination with Linnartz and Callway, it is not seen how the present claims are rendered obvious. The Examiner admitted in

pa-974786

Application No.: 09/505,621

7

Docket No.: 136922001900

making the present rejection that the mere combination of Linnartz and Callway was not sufficient to meet Claim 1 since he withdrew his earlier rejection based on that combination of two references in favor of the present rejection citing Linnartz, Callway plus Panabaker. Hence the Examiner conceded that Panabaker is necessary in the combination to meet the claims. However, as pointed out above, Panabaker clearly teaches away from the claim aspect of carrying the data in the video line in the vertical blanking interval carrying parental blocking data. Hence one of ordinary skill in the art upon review of Linnartz and Callway and Panabaker would understand that Panabaker is not compatible with use of the parental blocking line and would have no reason to combine Panabaker's teachings as regards data length or number of fields (as cited by the Examiner) with those of the other references.

It is understood that the Examiner cited Panabaker to meet the claim aspect of carrying in the VBI large amounts of data which extend over a plurality of video fields. However, Panabaker teaches away from the other aspect of Claim 1 which is the particular video line to use for this purpose and hence it is respectfully submitted that one of ordinary skill in the art would not view Panabaker as a suitable companion to or combination with Linnartz and Callway.

pa-974786

Application No.: 09/505,621

8

Docket No.: 136922001900

Hence not only does Panabaker teach away from an element of the claims, it is also clear that without Panabaker the present rejection fails as the Examiner admitted by adding Panabaker in the current office action to his rejection.

Hence it is respectfully submitted that in the absence of obviousness, Claim 21 is patentable as distinguishing over the references since their combination lacks motivation with the inclusion of Panabaker. Hence Claim 1 distinguishes over the references as do the dependent Claims 2-6 and 42.

Similarly independent apparatus Claim 5 distinguishes over the same combination of references as cited against Claim 1 for at least the same reasons and is similarly patentable, as are its dependent Claims 6, 41 and 43.

Hence it is respectfully submitted that all the present claims are patentable over the current rejection and it is requested that the Examiner reconsider the rejection and withdraw same. Even though this is a final rejection, since no claim amendments have been made here but it is merely pointed out how the rejection fails, it is submitted that this response is entitled to full consideration and entry under Rule 116 and the rejection be withdrawn and all pending Claims 1-6

pa-974786

Application No.: 09/505,621

9

Docket No.: 136922001900

and 41-43 be allowed. If the Examiner contemplates other action, please contact the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no.136922001900. However, the Commissioner is not authorized at this time to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

By Norman R. Klivans
Norman R. Klivans
Registration No.: 33,003
MORRISON & FOERSTER LLP
755 Page Mill Road
Palo Alto, California 94304-1018
(650) 813-5850

pa-974786